

D.11 Utilities and Service Systems

This section addresses the environmental setting and impacts of utilities and service systems for the Proposed Project, Existing Pipeline ROW Alternative, and No Project Alternative. This analysis focuses on the existing utility and service system capacities and capabilities and examines how the project would affect these systems.

D.11.1 Environmental Baseline

The utilities and service systems analysis examines the provision of utility and other services along the proposed and alternative routes, providing an overview of the types and general locations of utilities in relation to the pipeline corridors, and specifically evaluating the utilities and services required by the project. Due to the fact that the U.S. Department of Transportation Office of Pipeline Safety has recently categorized data pertaining to pipelines (including their location, capacity, and type) as sensitive, critical infrastructure information, public access to this data has become restricted for security reasons. As such, only information that continues to be made public and is readily accessible is presented in this section. Where public information is no longer available, generalizations have been made to allow rudimentary analysis in absence of detailed, specific data. While this specific data would provide a better picture of the existing utilities along the pipeline corridors, in large part, this level of detail is unnecessary for the level of analysis needed to determine the impacts generated by the Proposed Project and alternatives.

D.11.1.1 Regional Overview

The Proposed Project, Existing Pipeline ROW Alternative, and No Project Alternative would affect the three counties that the existing and proposed pipeline corridors traverse: Contra Costa, Solano, and Yolo Counties. A variety of local and regional purveyors in this area provide and maintain utility and service system facilities associated with electricity, water, stormwater and wastewater, solid waste, communications, and natural gas. Public utilities such as these run parallel to, or cross, most of the ROW of the pipeline routes in the form of water mains, sewer pipes, storm drains, power lines, gas mains, telephone lines, and other petroleum product pipelines. Utility companies generally post signs along the corridors that they use. Also, Underground Service Alert (also known as “Dig Alert”), a non-profit organization supported by utility firms, provides specific information on the location of underground utilities to contractors upon request, shortly prior to construction after preparation of the final pipeline designs.

The exact utility location of the pipeline corridor would be determined during the development of the detailed construction plans. Table D.11-1 lists the jurisdictions crossed by the Proposed Project and Existing Pipeline ROW Alternative and the utility and service providers for each jurisdiction. After construction, the pipeline location will be identified through two primary means. First, as mentioned above, signs would be posted along the corridor in which the line is located. Signs for oil and gas pipelines are typically yellow or red plates on metal stakes identifying the owner, name of the pipeline, and a telephone number for reporting problems. Second, Underground Service Alert maintains a computer database system of companies with buried utilities, so any utility providers planning subsurface excavation can find exact locations of buried pipelines.

Table D.11-1. Utility and Service Providers by Jurisdiction

Jurisdiction	Utility or Service System Provider
Contra Costa County	Natural gas – PG&E Electricity – PG&E Water – Contra Costa Water District Wastewater – Mt. View Sanitary District Solid waste – Contra Costa Solid Waste Authority Telephone – Pacific Bell
City of Martinez	Natural gas – PG&E Electricity – PG&E Water – City of Martinez Water Division/Contra Costa Water District Wastewater – Mt. View Sanitary District Solid waste – City of Martinez Solid Waste & Recycling Department Telephone – Pacific Bell
Solano County	Natural gas – PG&E Electricity – PG&E Water – Solano County Water Agency Wastewater and solid waste – Solano County Environmental Management Department Telephone – Pacific Bell
City of Benicia	Natural gas – PG&E Electricity – PG&E Water – Solano County Water Agency Wastewater and Sewer – City of Benicia Public Works Solid waste – Pleasant Hill Bayshore Disposal Telephone/fiber optic – Pacific Bell
City of Fairfield	Natural gas – PG&E Electricity – PG&E Water – Solano County Water Agency/Fairfield Department of Public Works Water Division Wastewater and sewer - Fairfield Department of Public Works Water Division Solid waste – Solano Garbage Company Telephone/fiber optic – Pacific Bell/AT&T
City of Suisun City	Natural gas – PG&E Electricity – PG&E Water – Solano County Water Agency Wastewater and sewer – Suisun City Department of Public Works Solid waste – Solano Garbage Company Telephone – Pacific Bell
Yolo County	Natural gas – PG&E Electricity – PG&E Water – Yolo County Flood Control & Water Conservation District Wastewater – Yolo County Planning and Public Works Solid waste – Yolo County Division of Integrated Waste Management Telephone – Pacific Bell
City of West Sacramento	Natural gas – PG&E Electricity – PG&E Water and wastewater – West Sacramento Public Works Department Solid waste - Yolo County Division of Integrated Waste Management Telephone – Pacific Bell

Project-Required Utilities

The Proposed Project and Existing Pipeline ROW Alternative would require potable or reclaimed water to be purchased from local water districts for dust suppression and hydrostatic testing. Water service is provided to cities along the Proposed Project and Existing Pipeline ROW Alternative routes by a variety of water purveyors, which are shown in Table D.11-1.

Many water districts have developed or are planning reclaimed water programs. Two conditions are necessary: treatment of the water to secondary or tertiary (sub-potable) standards; and installation of delivery pipelines. Reclaimed water must be kept separate from drinking water and is used for industrial, groundwater recharge, and landscaping needs. Reclaimed water is priced lower than drinking water. It would be usable by the project for dust suppression and hydrostatic testing where available.

City-operated lines provide sewer services in each of the jurisdictions along the Proposed Project and Existing Pipeline ROW Alternative routes. Similarly, stormwater flows are conveyed by the flood control facilities of each respective jurisdiction. Additionally, each jurisdiction provides waste management services through regional landfills and permitted treatment and disposal facilities. Wastewater, stormwater, and waste management service providers for each of the jurisdictions are shown in Table D.11-1.

D.11.1.2 Environmental Setting: Proposed Project

As described in Section B.3, the Proposed Project Pipeline route would primarily follow existing utility, railroad, and roadway corridors from Concord to West Sacramento. Utilities of various types would parallel the proposed pipeline throughout almost the entire length of the route. Public utilities would also cross the proposed pipeline corridor at most street intersections along the ROW. These utilities, which include sewer mains, storm drains, water mains, gas mains, telephone, and power lines, serve local land uses. Local gas lines, water, and sewer mains are also located in some roads that would be used for the pipeline, while other petroleum product pipelines, electrical transmission lines, and fiber-optic communication cables would be located in railroad and transmission ROWs used for the pipeline. Table D.11-2 lists information by milepost for major utility types that would likely share utility corridor space with the Proposed Project. As described above, due to security concerns, exact utility locations along the Proposed Project corridor would not be determined until preparation of the final pipeline designs and development of the detailed construction plans. Please refer to Figure B-3 in Section B (Project Description) for a typical ground profile of the proposed route.

Table D.11-3 lists the waste management agencies along the proposed route. These agencies would be asked to accept construction wastes, including trench spoils, surplus construction materials, and general refuse from workers and construction operations.

Phase 1 and Phase 2 Carquinez Strait Crossings

The Proposed Project includes the Phase 1 Carquinez Strait Crossing, which would use the existing 14-inch pipeline to cross the strait. The Phase 2 crossing would require a new directionally drilled crossing, as illustrated in Figure B-6. The construction activity for these crossings would occur very near the Strait, in areas where there are few other utilities.

D.11.1.3 Environmental Setting: Existing Pipeline ROW Alternative

The Existing Pipeline ROW Alternative route would be in the same ROW as the Applicant's existing petroleum product pipeline from Concord to West Sacramento. As described in Section C.3, the Existing Pipeline ROW Alternative would be nearly entirely within the UPRR ROW. A variety of utilities parallel the existing pipeline route and public utilities cross the pipeline corridor at the few street intersections along the ROW. As with the proposed pipeline, these utilities serve local land uses and include sewer mains, storm drains, water mains, gas mains, telephone, and power lines. The Existing

Pipeline ROW Alternative follows approximately the same ROW corridor as the proposed pipeline for

Table D.11-2. Utilities Along the Proposed Project Route

Segment	Milepost	ROW Description	Jurisdiction	Natural Gas	Electrical Transmission	Petroleum Products	Water	Wastewater / Sewer	Telephone / Fiber Optic Cable
1	0.0–1.8	Open land/ transmission corridor	Contra Costa County, City of Martinez	●	●	●			
	1.8–2.4	Central Avenue	City of Martinez	●	●	●	●	●	●
	2.4–4.8	Waterbird Way / Shore Terminal Property / Rhodia Facility	City of Martinez	●	●	●			
	4.8–6.1	Carquinez Strait crossing	Contra Costa County, Solano County			●			
2	6.1–9.6	Paved Lots / Industrial Way / Park Road / 2nd Street	City of Benicia	●	●	●	●	●	●
	9.6–17.6	Private ROW	Solano County	●		●			
3	17.6–22.9	Transmission Corridor / UPRR ROW	Solano County, City of Fairfield	●	●	●			
	22.9–24.5	Cordelia Road	Solano County	●	●	●			
4	24.5–30.7	Suisun City and Fairfield Road ROWs	Solano County, City of Fairfield, City of Suisun City	●	●	●	●	●	●
5	30.7–31.5	Transmission corridor	Solano County	●	●	●			
	31.5–54.7	Private ROW – abandoned railroad	Solano County, Yolo County	●		●			
6	54.7–65.1	Transmission corridor / private ROW	Yolo County	●	●	●			
	65.1–61.2	Transmission corridor / private ROW	Yolo County	●	●	●			
	61.2–64.8	UPRR ROW	Yolo County, City of West Sacramento	●		●			
	64.8–68.0	Industrial Boulevard / Port Access Road	City of West Sacramento	●	●	●	●	●	●
	68.0–69.9	South River Road	City of West Sacramento	●	●	●	●	●	●
7	-	Levee ROW	City of West Sacramento	●	●	●	●	●	●

Table D.11-3. Waste Management Agencies Along the Proposed Route

Landfill	Agencies Served	Jurisdictions Served	Available Capacity?
Keller Canyon Landfill	Contra Costa Solid Waste Authority, City of Martinez Solid Waste Recycling Department, Pleasant Hill Bayshore Disposal	Contra Costa County, City of Benicia, City of Martinez	Yes
Potrero Hill Landfill	Solano County Environmental Management Department, Solano Garbage Company	Solano County, City of Fairfield, City of Suisun City	Yes
Yolo County Central Landfill	Yolo County Division of Integrated Waste Management	Yolo County, City of West Sacramento	Yes

nearly 22 miles of its length, along Segments 1, 2, 4, and 6, and shares the corridor with the other utilities identified in those segments (as shown in Table D.11-2). The majority of the remainder of the route is along the UPRR ROW, and the main utilities found paralleling the route are natural gas and petroleum product pipelines and occasional transmission lines.

Mitigation Segments EP-1 and EP-2

Two mitigation segments are proposed to reduce impacts in portions of the Existing Pipeline ROW Alternative: Mitigation Segments EP-1 and EP-2. Mitigation Segment EP-1 would require use of a 13.5 mile segment of the Proposed Project route (utilities and jurisdictions are defined in Tables D.11-2 and D.11-3; see Segments 2 and 3), and would avoid use of an isolated segment of UPRR ROW. Mitigation Segment EP-2 would avoid central Davis and the very constrained UPRR corridor, and would use two rural roadways (with reduced utility usage) instead.

D.11.1.4 Environmental Setting: No Project Alternative

Under the No Project Alternative, the existing pipeline would continue to be used to transport petroleum products from Concord to West Sacramento. It would be upgraded with booster pumps and possibly requirement segments. Operation and maintenance would continue as normal. Over time, it is likely that additional utilities and service systems could be added to the corridor used by the Applicant's existing pipeline.

D.11.2 Applicable Regulations, Plans, and Standards

The following section presents the federal, State, regional and local utility and service system regulations, plans, and standards that pertain to the Proposed Project and Existing Pipeline ROW Alternative.

D.11.2.1 Federal

As required by the U.S. Department of Transportation, the pipeline for either the Proposed Project or the Existing Pipeline ROW Alternative would be buried at least three feet below ground surface and one foot clear of all existing substructures. The pipeline will be deeper as required to accomplish special crossing locations, such as directional drills, road bores, and freeway crossings. In heavy-traffic areas, the pipeline would generally be buried at least four feet deep.

As described in Section B.5.3 of the Project Description, System Inspection and Maintenance, federal regulations (49 CFR Part 195) require bi-weekly visual inspections of the pipeline route to identify

potential threats to the integrity of the pipeline as well as highway, utility, and pipeline crossing locations are also required by CFR 49 Part 195.

Section B.5.4 of the Project Description, Emergency Response, describes federal and state regulations (SB 2040 and 40 CFR Part 300, the Hazardous Substances Pollution Contingency Plan) requiring an Oil Spill Response Plan (OSRP). The OSRP provides a finalized list of emergency service providers and lists third-party contractors providing manpower and equipment such as vacuum trucks, boats, oil skimmers, absorbent and skirted booms, dump trucks, portable tanks, absorbent materials, dispersants, steam cleaners, hydroblasters, cranes, and forklifts.

D.11.2.2 State

California state law (Article 2 of California Code 4216-4216.9, Section 1, Chapter 3.1) requires that an excavator must contact a regional notification center at least two days prior to excavation of any subsurface installations. The center for northern California is Underground Service Alert. Any utility provider seeking to begin an excavation project can call Underground Service Alert's toll-free hotline. Underground Service Alert, in turn, will notify the utilities that may have buried lines within 1,000 feet of the excavation. Representatives of the utilities are required to mark the specific locations of their facilities within the work area prior to the start of excavation.¹ The excavator is required to probe and expose the underground facilities by hand prior to using power equipment.

D.11.2.3 Regional and Local

In Section B.5.4 of the Project Description (Emergency Response), SFPP states that local agencies have also reviewed and approved the project's OSRP. The OSRP requires that local emergency response providers be notified to assist in traffic control, evacuation of homes or businesses, crowd control, ambulance and hospital services, and backup fire protection services.

D.11.3 Environmental Impacts and Mitigation Measures for the Proposed Project

This section considers the potential for the project to exceed the supply of project related utilities made available by local providers and also the potential for disruption of utilities and service systems. Please refer to sections on Pipeline Safety and Risk of Accidents (D.2) and Traffic and Transportation (D.12) for discussion of related issues.

The analysis of impacts and mitigation measures is presented below. This analysis is based on the consideration of the location of utility and service alignments that may run parallel to or cross the proposed and alternative pipeline routes, and the capacity of local utilities and service systems to provide for construction, possible accidents, and operation and maintenance of the project.

D.11.3.1 Introduction

With the exception of the Phase 1 Carquinez Strait crossing for which there would be no new construction and therefore no utility and service systems impacts, the following impact analysis applies to all pipeline segments. As the demands of project-required utilities affect regional resources, and as the exact location of utilities that may parallel or cross the pipeline route would not be known until shortly

¹ Markings are made directly on the pavement using spray paint.

prior to construction, the utility and service system analysis is conducted over a regional scale, focusing on the jurisdictions listed in Table D.11-1.

D.11.3.2 Definition and Use of Significance Criteria

The CSLC has determined that a utilities and service systems impact would be considered significant and require additional mitigation if project construction or operation would:

- Exceed water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.
- Conflict with federal, State, and local statutes and regulations related to solid wastes, or be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

D.11.3.3 Impacts of Pipeline Construction

The two types of impacts on utilities and service systems identified in this section can be divided into:

- System disruption impacts, and
- Project-required utility impacts.

Service disruption impacts could occur during construction, repair, or operational maintenance when either a known utility must be disconnected to allow installation or repair of the proposed pipeline and then reconnected, or when construction activities accidentally damage a nearby utility or service system. Project-required utility impacts could occur when the project generates more waste or requires more water than the capacities of local facilities can accommodate.

This section does not address the seven project segments (including the Segment 7, Wickland Connection) individually, because impacts would be similar in all areas.

Impact US-1: Service Disruption During Construction

Pipeline construction could accidentally damage existing utilities lines. (Potentially Significant, Class II, or Less Than Significant, Class III)

The Applicant would contact Underground Service Alert and manually probe for existing buried utilities in the Proposed Project pipeline corridor prior to any powered-equipment excavation. After probing within streets or other ROWs, a route for the pipe within the easement can usually be defined that does not affect existing utilities. However, given the large number of utilities that are present in the pipeline corridor, some service disruptions during construction are likely to be unavoidable at a few locations along the ROW. These disruptions could occur while the pipeline is laid in the trench and the interrupted utility reconnected around the new pipeline placement.

SFPP would notify emergency response providers near the proposed route before construction of the exact construction locations, road closure schedules, and potential alternate routes. Because the density of buried utilities is greater within urbanized areas and the number of homes and businesses that could be affected by service disruption is higher in cities than in unincorporated areas, such service disruptions would affect populated areas more severely than the rural areas along the pipeline route. Service interruption would generally occur for only a few hours and those whose services would be interrupted would be notified in advance of the unavoidable interruption, where possible. When these service interruptions are planned and affected parties are notified prior to the outage, the impact is considered

adverse, but less than significant (Class III). No mitigation is required. However, in many cases, accidental outages can occur, leaving adjacent homes and businesses without water, electricity, or phones for short periods of time. Accidental outages are considered to be potentially significant impacts (Class II), and would be mitigable to less than significant levels through implementation of Mitigation Measure US-1a.

Mitigation Measure for Impact US-1: Service Disruption During Construction

US-1a Protection of Underground Utilities. Prior to the start of construction in each jurisdiction, the Applicant shall submit to the CSLC written documentation, including evidence of project review by the appropriate public works agencies for that jurisdiction, including the following:

- Construction plans showing the dimensions of existing and proposed underground structures and illustrating the distance of the proposed pipeline from existing underground utilities.
- Documentation that the Applicant provided the plans to affected jurisdictions (as identified in Table A-1) and that the plans were approved.
- Copies of all required permits, agreements, or conditions of approval (as identified in Table A-1).

Residual Impact. With implementation of Mitigation Measure US-1a, impacts from service disruption during construction would be less than significant.

Impact US-2: Water Supply

Large quantities of water would be used during project construction for dust suppression and hydrostatic testing. The water demands of the project may burden the water supply of local water providers. (Potentially Significant, Class II)

Impact Discussion

Approximately 120,000 gallons of water per day during the eight-month construction period would be necessary for dust suppression and 5.4 million gallons of water would be required for hydrostatic testing. Several construction spreads would work simultaneously along the pipeline route. Up to 15,000 gallons per day would be required at a single rural spread during dry, windy conditions. These operations could use either potable water or reclaimed water.

Water agencies along the proposed route are listed in Table D.11-1. SFPP would have to make special provisions to obtain reclaimed water, where it is available. Reclaimed water could also be available for hydrostatic testing of the pipeline's integrity following construction and would reduce the amount of potable water needed from local water districts.

Mitigation Measure for Impact US-2: Water Supply

US-2a Use of Reclaimed Water. The Applicant shall coordinate with local water districts in advance in order to efficiently obtain reclaimed or potable water for delivery to the construction sites and to meet any restrictions imposed by them. The Applicant shall provide to the CSLC, a minimum of 60 days prior to the start of construction, a letter describing the availability of reclaimed water and efforts made to obtain it for use during construction.

Residual Impact. With implementation of Mitigation Measure US-2a, impacts on local water supplies would be less than significant.

Impact US-3: Solid Waste Disposal

Project construction would generate wastes including construction materials, trench spoils, and general refuse, and these wastes would need to be disposed of in local or regional facilities. (Less than Significant, Class III)

Impact Discussion

As described in Section B.4.3.3 (Waste Management) of the Project Description, waste generated from construction can be separated into the following categories:

- Non-hazardous metal waste, consisting of items like short line pipe sections and metal scrap.
- Non-hazardous non-metal waste, including boxes and crates used in shipment of materials and daily refuse from construction workers.
- Trenching spoils, consisting of such materials as rubble, soils, and broken asphalt.
- Hazardous wastes, including contaminated spoils and wastes from x-raying and coating.

Non-hazardous metal and non-metal waste would be hauled to local disposal centers for recycling or taken to landfills. Hazardous wastes would be sent to a permitted treatment or disposal facility. Trenching and excavation spoils would be screened and separated for use as backfill materials at the site of origin to the maximum extent possible. Spoils unsuitable for backfill use would be disposed of in available county landfills. The disposal demand is reasonable relative to the solid waste disposal capacities of the landfills in the areas.

Mitigation Measure. None required.

Residual Impact. The potential impact from solid waste disposal (Impact US-3) would be less than significant (Class III), and no mitigation is required.

Phase 1 and Phase 2 Carquinez Strait Crossings

Both the Phase 1 and Phase 2 crossings would occur in the same general areas, with construction activities immediately south and north of the Carquinez Strait. The Phase 1 crossing would have fewer impacts because no new HDD would be completed, but neither crossing is expected to significantly effect utilities or service systems. The mitigation measures described above for construction would apply to the Phase 1 crossing.

D.11.3.4 Impacts of Pipeline Accidents

Impact US-4: Pipeline Accident Effects on Buried Utilities

In the event of a pipeline accident, an adverse interaction between the proposed pipeline and existing utilities could occur, potentially resulting in a concurrent release of water or natural gas, or a fire. (Less than Significant, Class III)

Impact Discussion

The accident data provided in Section D.2 (Pipeline Safety and Risk of Accidents) presents data on the likelihood of occurrence of various size accidents in a given one-mile pipeline segment. This type of accident is most likely to occur in an area where there are clusters of utilities serving larger populations. By comparing the lengths of pipeline route along these clusters of utilities to the accident data presented in Section D.2, it can be estimated how often spills are likely to occur adjacent to these clusters, and an assessment of the impact of an accidental spill can be made.

Table D.11-2 shows the general utility types adjacent to the pipeline route by milepost, and indicates that the areas with the most utilities adjacent to the proposed pipeline are in the City of Martinez (MP 1.8–2.4), the City of Benicia (MP 6.1–9.6), the City of Suisun City (MP 24.5–30.7), and the City of West Sacramento (MP 64.8–69.9). The pipeline crosses a total of approximately 15.5 miles in these areas.

Table D.11-4 lists the spill frequency for the high-density utility areas (calculated from the one-mile spill data in Section D.2). The anticipated lifetime of the proposed pipeline is 50 years. The potential frequency of a small or medium sized spill affecting utilities would be once every 23.4 years or 77.4 years, respectively. The size of these more frequent spills would reduce their potential for extensive utility damage. There is more potential for large and very large spills to damage utilities. However, as illustrated in Table D.11-4, it is unlikely that such spills would occur during the pipeline's 50-year lifetime.

Table D.11-4. Spill Frequency in High-Density Utility Areas

Spill Size	Spill Frequency
Small (>1 bbl)	Once in 23.4 years
Medium (>100 bbl)	Once in 77.4 years
Large (>1,000 bbl)	Once in 168.2 years
Very Large (>10,000)	Once in 941.6 years

Mitigation Measure. None required.

Residual Impact. The impact of a pipeline accident on other underground utilities would be less than significant (Class III) and no mitigation is required.

D.11.3.5 Environmental Impacts of the Cordelia Mitigation Segment

This mitigation segment was developed to avoid sensitive biological and water resources within Cordelia Marsh and Slough. The 2.6-mile segment diverges from the proposed route at MP 17.6 and rejoins the proposed route at approximately MP 20.0. The Cordelia Mitigation Segment parallels Ramsey Road until Cordelia Road, where it continues along Cordelia Road to the UPRR ROW where it rejoins the proposed route (see Figure D.4-3).

Use of the Cordelia Mitigation Segment would result in the installation of the pipeline within or immediately adjacent to two Solano County roadways (Ramsey Road and Cordelia Road). Utility lines are traditionally located in or near road or other existing public ROWs. Therefore, Mitigation Measure US-1a would be necessary to ensure that construction activities associated with the Cordelia Mitigation Segment do not accidentally damage and subsequently disrupt service of existing utilities resulting in less than significant impacts (Class II).

The Proposed Project route segment that would be replaced by the Cordelia segment would not encroach on any public roads or other ROWs and is therefore unlikely to affect existing utilities. Therefore, the Proposed Project route segment is preferred over the Cordelia Mitigation Segment.

D.11.3.6 Impacts of Pipeline Operation

Impact US-5: Service Disruption During Operation

During normal pipeline operation, maintenance activities could accidentally damage one or more utilities sharing the pipeline corridor, resulting in short-term service disruption. (Less than Significant, Class III)

Impact Discussion

Given the anticipated limited extent of pipeline construction during maintenance activities, this impact during operation is considered to be less than significant (Class III).

Mitigation Measure. None required.

Residual Impact. The potential for service disruption during operation would be less than significant.

Impact US-6: Operational Effects on Utility Services

Pipeline operation would result in generation of small amounts of solid waste, and the demand for water and energy. (Less than Significant, Class III)

Impact Discussion

As the pipeline is a replacement and upgrade to an existing pipeline, operation of the pipeline would not significantly increase the amounts of solid waste or wastewater produced over the existing operation and would not significantly increase the operational demand for water or energy. No adverse impacts would occur from these incremental increases.

The telephone communications for the SCADA continuous monitoring system, described in Section B.5.2 (System Control, Operation, and Safety Features) of the Project Description, would be a closed loop system installed and maintained by the Applicant. This system would put no burden on existing telecommunication providers, and serves as another method to ensure safety of the pipeline. No adverse impacts to service providers would occur.

The new pumps and suction/surge systems at the Concord and Sacramento Stations would require a substantial amount of electric power from the local power grid, but they would replace pumps on the existing system, so the incremental increase in power required will be small, resulting in no adverse impact on energy providers.

Mitigation Measure. None required.

Residual Impact. Pipeline operation would result in less than significant (Class III) impacts on utilities. No mitigation is required.

D.11.3.7 Impacts of Proposed Station Changes

Construction at stations has the potential to create impacts US-1 through US-6. However, the demands on utilities and service systems due to construction of the proposed station changes would be relatively small compared to construction of the pipeline itself. As these changes would occur within existing facilities at both stations, water demand for dust suppression during construction will be low, and should pose no

impact to local water distribution systems. Solid waste resulting from construction would be sorted and hauled to the appropriate disposal facilities, and would be considerably less than that generated by construction of the pipeline. As indicated in Table D.11-3, the Yolo County Central Landfill and Keller Canyon Landfill both have capacity to accept waste generated by the proposed station changes.

No adverse impacts would occur from utility demands required by the proposed construction at either the Concord or Sacramento Stations.

D.11.3.8 Cumulative Impacts

Section E.3 presents a list of projects that may be constructed concurrently with the Proposed Project.

Construction. Construction activities of the Proposed Project along with other utility infrastructure projects would affect emergency access to utilities in the event of a service disrupting accident. Table E-1 (Section E.3) lists a variety of approved or pending utility infrastructure projects in the vicinity of the Proposed Project. Section D.12 (Traffic and Transportation) addresses the impact of construction on emergency response. The cumulative impact to utilities and service systems from these concurrent construction projects is considered to be potentially significant but mitigable to less than significant levels through implementation of Mitigation Measures T-2 (requiring preparation of Traffic Control Plans) and T-7 (requiring notification to emergency service providers of construction location and timing). Therefore, the impacts from construction of this project would not be cumulatively considerable.

Collocation Accidents. As discussed above, other pipelines (petroleum products, natural gas, and water) would be present along some sections of the project route. In the event of a major accident, an adverse interaction between one of these pipelines and the Proposed Project could occur. Rupture of the proposed pipeline could lead to a petroleum product spill, gas release (from other pipelines in the ROW), and possibly fire that would either impact other utilities or impede restoration of service. In addition, rupture of another pipeline in the common easement could damage or rupture the proposed pipeline. Damage to other utilities and service systems in the pipeline corridor due to an accident would impede restoration of service. With mitigation proposed in this EIR, the impact of collocation accidents associated with this project would not be cumulatively considerable.

D.11.4 Environmental Impacts and Mitigation Measures for Existing Pipeline ROW Alternative

The Existing Pipeline ROW Alternative would follow the route of the Applicant's existing petroleum product pipeline from Concord to West Sacramento, utilizing railroad ROW along most of its length. Impacts from construction accidents resulting in service disruption (Impact US-1) would be similar to those of the Proposed Project, and the Mitigation Measure US-1a would be required. With implementation of this measure, residual impacts would be less than significant.

This alternative would be approximately 60 miles long, shorter than the proposed pipeline by approximately 10 miles. Quantities of water required for construction of the Existing Pipeline ROW Alternative would be comparable to, but slightly less than that required by the proposed pipeline. Arrangements would need to be made for the acquisition and use of reclaimed water to reduce demands on local water providers. Impacts to these providers (Impact US-2) would be considered potentially significant (Class II), but mitigable to less than significant levels with implementation of Mitigation Measure US-2a.

Quantities of waste generated by construction of the Existing Pipeline ROW Alternative would also be slightly less than quantities generated by construction of the proposed pipeline. Disposal of wastes would be attended to in the same manner as with the proposed pipeline and would utilize the same landfills, listed in Table D.11-3. As discussed in Section D.11.3.4 (Impacts of Pipeline Construction), the disposal demand is reasonable relative to the capacities of the landfills in the region. Impact US-3 would be minor and would be considered adverse, but less than significant (Class III).

The Existing Pipeline ROW Alternative is a replacement and upgrade to an existing pipeline, so operation of the pipeline would not significantly increase the amounts of solid waste or wastewater produced over the existing operation and would not significantly increase the operational demand for water or energy. No adverse impacts would occur from these incremental increases.

In general, project-required utility demands would be less for the Existing Pipeline ROW Alternative than for the Proposed Pipeline because of the shorter route distance and resulting reduction in construction.

Mitigation Segments EP-1 and EP-2

As described in Section D.11.1.3, two mitigation segments are suggested for the Existing Pipeline ROW Alternative. Mitigation Segment EP-1 would move the route from the UPRR ROW in an isolated area where there would be few utility conflicts to more developed areas along H-680 where more conflicts could occur. Therefore, the original alternative route is preferred over Mitigation Segment EP-1.

Mitigation Segment EP-2 would move the alternative route out of central Davis and into rural roadways. This mitigation segment would greatly reduce the likelihood of utility conflicts due to the use of less densely developed areas. Therefore, Mitigation Segment EP-2 is preferred over the original alternative route.

D.11.5 Environmental Impacts of the No Project Alternative

The No Project Alternative would require some new construction to reinforce the existing pipeline system, but much less than that required for the new pipeline. As a result, it would generate much less disruption of utility services and place less demand on service providers. Impacts US-1 (Service Disruption), US-2 (Water Supply), US-3 (Solid Waste Disposal) would be less than significant (Class III).

After the existing pipeline system reaches capacity in 2006, improvements to the existing system and truck or train transport of petroleum products would occur. Use of trains and tanker trucks between Concord and West Sacramento would also pose a risk to utilities with the potential occurrence of accidents. The risk of an accident and major spill from the older existing pipeline and these other petroleum product transportation modes is greater than that for the Proposed Project. Overall, pipeline accident disturbance to utility service systems (Impact US-4) would be adverse but not significant (Class III).

D.11.6 Mitigation Monitoring, Compliance, and Reporting Table

Two mitigation measures are recommended for reduction of impacts of the Proposed Project and Existing Pipeline ROW Alternative. These measures would be implemented through the Mitigation Monitoring Program as presented in Table F-10 (see Section F). The mitigation measures recommended in this section are listed in that table, along with the responsible agencies or parties, the effectiveness criteria for the measures, and the time period when monitoring is to take place.